

WHAT IS CLAIMED IS:

1. A pressure-sensitive resistor for a pressure-sensitive sensor that includes a pair of electrodes provided on first and second base films, respectively, between the first and second base films, the pressure-sensitive resistor provided by one layer on one of the electrodes to form a predetermined gap between the one layer of the pressure-sensitive resistor and the other electrode or by two layers on the electrodes to form a predetermined gap between the two layers, the pressure-sensitive resistor comprising:

a binder resin having an elasticity modulus in a range between 10 and 1000 Mpa; and

a plurality of electrical conductive particles each of which is coated with a polymer.

2. The pressure-sensitive resistor according to claim 1, wherein the electrical conductive particles are carbon black particles.

3. The pressure-sensitive resistor according to claim 1, wherein the electrical conductive particles have a primary particle diameter that is in a range between 8 nm and 300 nm.

4. The pressure-sensitive resistor according to claim 3, wherein the primary particle diameter of the electrical conductive particles is in a range between 15 nm and 100 nm.

5. The pressure-sensitive resistor according to claim 1, wherein an amount of the polymer coated on the electrical conductive particles is in a range between 1 wt% and 70 wt% with respect to a total amount of the electrical conductive particles and the binder resin.

6. The pressure-sensitive resistor according to claim 5, wherein the amount of the polymer coated on the electrical conductive particles is in a range between 1 wt% and 50 wt% with respect to the total amount of the electrical conductive particles and the binder resin.

7. A pressure-sensitive sensor comprising:
first and second base films opposite to each other;
a pair of electrodes provided on first and second base films, respectively, between the first and second base films;
and

first and second pressure-sensitive resistors provided by two layers on the electrodes to form a predetermined gap between the first and second pressure-sensitive resistors, wherein:

a contact state between the first and second pressure-sensitive resistors is changed in accordance with a pressure applied to at least one of the first and second base films;

the electrodes are provided to change a resistance therebetween in accordance with the contact state between the first and second pressure-sensitive resistors; and

each of the first and second pressure-sensitive resistors is constructed with a binder resin having an elasticity modulus in a range between 10 and 1000 Mpa, and a plurality of electrical conductive particles each of which is coated with a polymer.

8. The pressure-sensitive sensor according to claim 7, wherein the electrical conductive particles are carbon black particles.

9. The pressure-sensitive sensor according to claim 7, wherein the electrical conductive particles have a primary particle diameter that is in a range between 8 nm and 300 nm.

10. The pressure-sensitive sensor according to claim 7, wherein an amount of the polymer coated on the electrical conductive particles is in a range between 1 wt% and 70 wt% with respect to a total amount of the electrical conductive particles and the binder resin.

11. The pressure-sensitive sensor according to claim 7, further comprising

a spacer disposed between the first and second base films so as to form the predetermined gap between the first and second pressure-sensitive resistors.

12. A pressure-sensitive sensor comprising:

first and second base films opposite to each other;
a pair of electrodes provided on first and second base films, respectively, between the first and second base films; and

a pressure-sensitive resistor provided by one layer on one of the electrodes to form a predetermined gap between the pressure-sensitive resistor and the other one of the electrodes, wherein:

a contact state between the pressure-sensitive resistor and the other one of the electrodes is changed in accordance with a pressure applied to at least one of the first and second base films;

the electrodes are provided to change a resistance therebetween in accordance with the contact state between the pressure-sensitive resistor and the other one of the electrodes; and

the pressure-sensitive resistor is constructed with a binder resin having an elasticity modulus in a range between 10 and 1000 Mpa, and a plurality of electrical conductive particles each of which is coated with a polymer.